

**REMARKS**

Applicant appreciates the Examiner's thorough examination of the subject application and requests reconsideration of the subject application based on the foregoing amendments and the following remarks.

Claims 1-20 are pending in the subject application.

Claims 9-12 are withdrawn from consideration as the result of an Examiner's earlier restriction requirement. Claims 9-12 were canceled in the foregoing amendment and thus, in view of the Examiner's earlier restriction requirement, Applicant reserves the right to present the above-identified withdrawn claims in a divisional application.

Claims 1-8 and 13-20 stand rejected under 35 U.S.C. §102 and/ or 35 U.S.C. §112, first paragraph.

Claims 1, 2 and 17 were amended to more clearly indicate that the supporting mechanism includes a plurality of support members that are arranged so as to *consist* essentially of one group of a support members that extend along only one side of the substrate bearing surface of the stage.

Claim 16 was amended to correct a typo.

Claims 21-23 were added to more particularly claim aspects/ embodiments of the present invention. Applicant respectfully submits that further consideration and review is not required for these claims and thus request entry of these claims into the subject application.

The amendments to the claims are supported by the originally filed disclosure.

35 U.S.C. §112, FIRST PARAGRAPH REJECTIONS

Claims 2, 16, 17, 19, and 20 stand rejected under 35 U.S.C. §112 because the subject application fails to provide a written description of the plurality or support members to rotationally move on the stage about the longitudinal axis of each support member. Applicant respectfully traverses. Because claims were amended in the instant amendment, the following discussion refers to the language of the amended claims. The specification was also objected to for the foregoing reasons.

As admitted by the Examiner, the subject application provides that the moving means causes the support members to rotationally move on the stage. It necessarily follows that such rotational movement on the stage can occur either by rotating each support pin about a point or axis that is external to the longitudinal axis of the support pin or rotating about a point or axis that coincides with the longitudinal axis X of the support pin. Thus, while not explicitly stated in the specification rotating about the longitudinal axis necessarily follows from the rotationally moved language provided in the subject application.

Accordingly, claims 2, 16, 17, 19 and 20 satisfy the requirements of 35 U.S.C. §112, first paragraph and, therefore, these claims are allowable and are considered acceptable.

35 U.S.C. §102 REJECTIONS

The Examiner rejected claims 1-8 and 13-17 under 35 U.S.C. §102(b) as being anticipated by Mears et al. [USP 5,040,484; "Mears"]. Applicant respectfully traverses as discussed below. Because claims were amended in the instant amendment, the following discussion refers to the

language of the amended claims. However, only those amended features specifically relied upon to distinguish the claimed invention from the cited prior art shall be considered as being made to overcome the cited reference.

In the above-referenced Office Action, it is asserted that by virtue of the comprising language the claims do not exclude the presence of additional support members such as those shown in Mears. This rejection was maintained, notwithstanding the prior amendment to each of claims 1, 2 and 17 to provide that the plurality of support members are arranged so as to consist essentially of one group of support members that are arranged so as to extend only along one side of the substrate bearing surface.

Applicants have again amended each of claims 1, 2 and 17 to provided that the supporting mechanism while comprising a number of features also includes a plurality of support members that are arranged so as to consist essentially of one group support members that extend only along one side of the substrate bearing surface of the stage and that these support members of said one group are arranged so as to support only one end surface of the substrate the end that faces down when the stage is in the film forming position. Applicant would note that the transitional phrase "comprising" while making a claim generally open does not mean that this phrase can be used to eliminate other language appearing in the claim being added to expressly limit the scope of the claim/ limitation of a claim. Thus, the further consisting essentially of language that appears in each of claims 1, 2 and 17 further narrows the scope of the respective limitation of each claim and thus the scope of each claim. Thus, in order for the claims of the present invention to read on the cited reference one would have to ignore the explicit language added by an Applicant to narrow the

scope of the claim or to read such explicit language out of the claim. Applicant respectfully submits that either of these actions would be inconsistent with U.S. Patent Laws.

The present invention is intended to enable transporting a substrate coated with a thin film without damaging the substrate or the thin film. This is achieved in the present invention by preventing or minimizing the adherence of a thin film material to the support members by means of the following constitution; namely that "a plurality of support members consist essentially of one group of support members which are provided so as to extend along one side only of the substrate bearing surface of the stage, . and support the substrate at only an end surface of the substrate, which faces downwards, when the stage is angularly displaced from a substrate receiving position at which the substrate has been received by the stage to a film forming at which a substrate bearing surface of the stage is vertical or substantially vertical position".

In contrast to the present invention, Mears discloses that a circular substrate is supported by a number of support members f1 through f14 over the entire peripheral surface of the substrate. Therefore, and has has been previously indicated by Applicants, the contact area between the support member and the substrate coated with a thin film of the support mechanism of Mears is very large as compared with that of the present invention. Accordingly, in Mears, adhesion of thin film material to the support members increases. Also, the support mechanism of Mears is most likely to give rise to peeling-off of the thin film from the substrate and cracks or chips in the substrate, when the support members (clamps) are removed. It is, therefore, impossible to achieve an object of the present invention by means of Mears' constitution.

It also is asserted that the wording of the current claims does not exclude Mears' f1 to f9 and f12 to f14, and that Mears' f10 and f11 has all the features of the support mechanism of the current claims. However, when interpreting the current claim language comprehensively, a plurality of support members included in the support mechanism "consisting essentially of one group of support members which are provided so as to extend along one side only of the substrate bearing surface of the stage, and support only an end surface of the substrate, which faces downwards when the stage is angularly displaced by the shaft member from a substrate receiving position at which the substrate has been received by the stage to a film forming at which a substrate bearing surface of the stage is vertical or substantially vertical position" is, as indicated herein, distinguishable from that disclosed and taught in Mears. Thus, it respectfully submitted that Mears' f1 to f9 and f12 to f14 do not correspond to the features of the presently claimed invention.

Further, it is asserted that Mears' f10 and f11 include all the features of the support member according to current claims. However, it is physically impossible to support only an end surface of Mears' substrate (only by f10 and f11), which faces downwards, when the stage is angularly displaced by the shaft member from the substrate receiving position at which the substrate is received by the stage to the film forming position at which the substrate bearing surface is vertical or substantially vertical. This is so, because such angular displacement would cause the wafer to fall from the substrate bearing surface. It is apparent that in *order* to prevent such falling of the substrate, Mears has a number of support members (f1 to f14). Therefore, it is incorrect to assume that in Mears that f10 and f11 exist independently of the other support

members. As such, Applicant respectfully disagrees with the asserted correspondence of the support members in Mears with the support members of the claimed invention.

Moreover, Mears' f10 and f11 do not teach or suggest the support member of the current claims of the present application. Therefore, it is respectfully asserted that the current claim language explicitly excludes the presence of f1 to f9 and f12 to f14 in Mears and the foregoing remarks show the differences of the claimed invention from f10 and f11 of Mears.

Notwithstanding Applicant's belief that the language of the pending claim was distinguishable from Mears, in the interests of advancing prosecution and for clarity, independent claims 1, 2 and 17 were amended to first define the support member as "a plurality of support members which are arranged so as to consist essentially of one group of support members that extend only along one side of the substrate bearing surface of the stage", and then to describe other features of the current claim 1.

Thus, for the foregoing reasons as well as the reasons already of record, Applicant respectfully submits that the as-amended claims are clearly distinguishable from the cited art, in both structure and function. It also is submitted that the cited reference includes *no* suggestion or teaching nor offers any motivation for modifying the apparatus disclosed in Mears so as to yield the substrate supporting mechanism of the present invention. Further, it is submitted that if the apparatus described in Mears was modified so as to yield the substrate supporting mechanism of the present invention, such a modification would destroy the intended purpose and function of the apparatus as disclosed in Mears.

As indicated above, Mears does not teach or suggest the constitution of supporting the wafer at one end surface of the substrate, which faces downwards, when the stage is angularly displaced by the shaft member from the substrate receiving position at which the substrate received by the stage to the film forming position at which the substrate bearing surface is vertical or substantially vertical. As also indicated above, this is so because such motion would cause the wafer to fall from the substrate bearing surface of Mears. In particular, it is impossible to support the wafer by making Mears' clamp the support member formed in a columnar shape of claim 7 when rotating a disk. As such the presently claimed invention as set forth in claim 7 is distinct and patentable over Mears.

As provided in MPEP-2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegel Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Or stated another way, "The identical invention must be shown in as complete detail as is contained in the ... claims. *Richardson v Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ 2d. 1913, 1920 (Fed. Cir. 1989). Although identify of terminology is not required, the elements must be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). It is clear from the foregoing remarks that the above identified claims are not anticipated by Mears.

As the Federal Circuit has indicated, in deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify *corresponding elements* disclosed in the allegedly anticipating reference (emphasis added, citations in support omitted). *Lindemann Maschinenfabrik GMBH v.*

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*American Hoist and Derrick Company et al.*, 730 F. 2d 1452, 221 USPQ 481,485 (Fed. Cir. 1984).

In concluding that the '770 Patent did not anticipate the claims, the Federal Circuit in *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, at 221 USPQ 485-486, further provides that:

The '770 patent discloses an entirely different device,  
composed of parts distinct from those of the claimed invention, and  
operating in a different way to process different materials differently.  
Thus, there is no possible question of anticipation by equivalents.  
Citations omitted.

It is clear from the foregoing remarks, that the allegedly corresponding elements disclosed in Mears do not in fact correspond to the elements of the claimed invention. It also is clear that the apparatus described in Mears functions and operates in a different manner from that of the claimed invention. Thus, there can be no disclosure or teaching in Mears of Applicant's invention.

It is respectfully submitted that for the foregoing reasons, claims 1-8 and 13-20 are patentable over the cited reference and satisfy the requirements of 35 U.S.C. 102(b). As such, these claims, including the claims dependent therefrom are allowable.

#### CLAIMS 21-23

As indicated above, claims 21-23 were added to more distinctly claim embodiments of the present invention. These claims are clearly supported by the originally filed disclosure, including the originally filed claims. It also is respectfully submitted that these added claims are patentable



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over the cited prior art on which the above-described rejection(s) are based. It also is respectfully submitted that the added claims do not require further search and consideration and thus entry of these claims into the subject application is respectfully requested.

#### OTHER MATTERS

Applicants filed a Supplemental Information Disclosure Statement/ Search Report Information Disclosure Statement dated December 14, 2004 in the USPTO, which IDS post -dates the above-referenced Office Action. Accordingly, Applicants respectfully requests that the Examiner reflect their consideration of this IDS in the next official communication from the USPTO. Applicant also respectfully requests the Examiner to call the undersigned collect and the below number in the event that this IDS has not been received by the Examiner and thus needs to be again submitted by Applicants for the Examiner's consideration.

It is respectfully submitted that the subject application is in a condition for allowance. Early and favorable action is requested.

Applicant believes that additional fees are not required for consideration of the within Response. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed

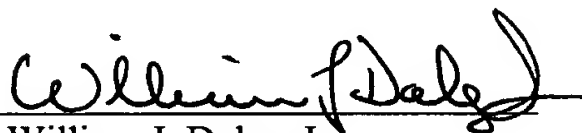
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for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit

Account No. **04-1105**.

Respectfully submitted,  
Edwards & Angell, LLP

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By:   
William J. Daley, Jr.  
(Reg. No. 35,487)  
P.O. Box 55874  
Boston, MA 02205  
(617) 439- 4444

Customer No. **21,874**